

## 900 SEWERAGE WORK

### ITEM 911 - COMPACTED BACKFILL

**911.01 Description**

**911.02 Materials**

**911.03 General**

**911.04 Method of Measurement**

**911.05 Basis of Payment**

**911.01 Description.** This work shall consist of compacting native or excavated material as trench backfill where shown on the plans or ordered by the Engineer and as specified herein.

**911.02 Materials.** Materials shall be suitable material *native to the project* or a granular material meeting the requirements of Section 912.02 and must be approved by the Engineer.

**911.03 General.** Where excavated material available for compacting proves to be unsuitable or the Contractor finds it impracticable to use the excavated material to meet the requirements of this item, the Contractor shall, at no extra compensation, procure suitable backfill material elsewhere and dispose of the unsuitable material.

Backfilling shall conform in every respect with the provisions of Section 901.17 and shall be governed by the results of such tests as may be ordered by the Engineer to determine that the compaction requirements of Section 912.03 have been met. Soil, granular material, or other approved material shall be spread in successive level layers of a depth to allow compaction to the specified density and of not more than 8 inches (203 mm) in thickness (loose measurement), unless otherwise specified and/or authorized in writing by the Engineer.

**911.04 Method of Measurement.** The number of cubic yards of compacted backfill to be paid for will be computed on the following basis:

Volume in cubic yards (cubic meters) equals W times L times D divided by 27 (0) where W is the specified trench width in feet (meters), L is the length of trench in feet (meters) as specified or ordered to be compacted and D is the distance in feet (meters) from 1) the top of the bedding or encasement on 6 through 27 inch (152-686 mm) pipe or 2) the top of the outside barrel of the pipe or encasement on 30 inch (762 mm) and larger pipe to a point 1 foot (0.3 m) below the existing ground elevation. These definitions for the D measurement may be varied as indicated or as specified or ordered by the Engineer. The length of trench will be measured along the centerline of the sewer in place without deduction for manholes or other structures built in the open trench. No extra payment will be made for compacted backfill in the extra excavation widths necessary at manholes and

other structures along the centerline of the work. At existing manholes or structures, where the work connects, the measurement for this item will be made from the centerline of the existing manhole or structure. At terminal manholes or structures, being constructed as part of the work, the measurement for this item will be through the manhole or structure to a point 1 foot (0.3 m) beyond the manhole or structure base. Where manholes or structures are built over existing sewers, as part of the work, compacted backfill will be measured along the centerline of the sewer between two points 1 foot (0.3 m) beyond and on either side of the manhole or structure base. Where sewer trenches intersect, at different elevations or at a manhole or structure being constructed as part of the work, a length equal to the specified width of trench for the lesser diameter pipe shall be deducted from the above measurement for the length of the intersection.

The Contractor will receive no compensation because of the following:

1. For substitution of granular or any other material for backfill material.
2. For being required to procure suitable backfill material elsewhere.
3. Work necessitated or material placed outside of the payment limits described above, which is necessary to secure the required compaction within the length of trench specified or ordered, due to unauthorized excavation.

**911.05 Basis of Payment.** The computed number of cubic yards (cubic meters) of compacted backfill measured for payment will be paid for at the contract unit price per cubic yard (cubic meter).

Payment will be made under:

<b>Item</b>	<b>Unit</b>	<b>Description</b>
911	Cubic Yard (Cubic Meter)	Compacted Backfill